

Privacy advocates are raising concerns about Google Inc.'s plans to cover San Francisco with free wireless Internet access, calling the company's proposal to track users' locations a potential gold mine of information for law enforcement and private litigators.

The Mountain View search engine intends to use the geographic data to match users with advertising so that they would see marketing messages from neighborhood businesses such as pizza parlors, cafes and book stores.

Google plans to use technology that would allow it to track users' whereabouts within a few hundred feet. The company said in its bid that it would retain the data for up to 180 days before deleting it, as part of an effort to "maintain the Google Wi-Fi network and deliver the best possible service."

Privacy advocates fear the information could be used by government officials to place users under surveillance and are more generally concerned that this new power raises the specter of "Big Brother" run amok.

"The greatest concern is that once you have that treasure trove of information, will people start to come looking for it?" said Kurt Opsahl, staff attorney for the Electronic Frontier Foundation, a privacy watchdog group.

Google declined to comment about any privacy concerns raised by its Wi-Fi proposal.

On Wednesday, San Francisco tapped Google, and its partner EarthLink, to build the so-called Wi-Fi network, which would allow virtually everyone within the city limits to get online without having to plug a cable into their computers for a connection. The parties must still agree on a contract and seek approval from the Board of Supervisors before the network can be installed by year's end, if all goes as expected.

Google, the most popular search engine, will offer the free portion of the Wi-Fi service, to be supported by online advertising. EarthLink intends to offer a subscription version that comes with a faster connection.

Privacy advocates focus their worries on Google's requirement that users log on with a Google account before accessing the free Wi-Fi. Signing in, they complained, makes it possible to track Internet use and location to specific individuals.

Even users who log on with a pseudonym are at risk, privacy advocates said. All it would take to track down a user's identity are a few subpoenas or search warrants.

Some of the fears are exacerbated by a recent attempt by the Justice Department to make Google divulge the search records of thousands of its users. The government wanted the information to help resurrect a law intended to protect children from Internet pornography,

Google largely prevailed in the subsequent court battle. Privacy advocates said Google could have avoided the problem altogether by not keeping user search records.

As for Wi-Fi, not everyone is fearful of law enforcement knocking at their door. Scott Peradotto, an art consultant in San Francisco who uses Wi-Fi nearly everyday, said he would gladly use Google's service despite its tracking abilities.

"As a responsible adult, I know that when I go online, I take a chance," he said.

Peradotto called Google's free service a fantastic idea, and said it would encourage him to go online even more frequently. Currently, he uses free Wi-Fi at cafes, and, when he can, from home by taking advantage of unsecured connections in his neighborhood.

Privacy advocates have encouraged Google to drop the sign-in requirement, arguing that there should be some form of anonymous service so that users can access the Internet "without fear of government or commercial surveillance and intrusion." Over the past six months, they've also sent two letters to the city to lobby their case.

Chris Vein, executive director of San Francisco's technology department, has said that privacy was an important factor in the city's choice of Wi-Fi bidders.

In its bid, Google said matching advertising with users based on their location is a good opportunity for small businesses, for which traditional advertising may be too expensive.

Tracking user location is possible because of the technology of a Wi-Fi network. To cover a city the size of San Francisco, Google and its partners must install hundreds of antennas, or nodes.

Google can get a good idea of where a Wi-Fi user is based on which node the user gets online through. Advertisements can then be matched with the user's location, potentially increasing the likelihood that the user will click on the ad and generate money for Google.

It could be the difference between seeing an advertisement for Macy's, if a user happens to be in Union Square, or a seafood restaurant if the user is near Fisherman's Wharf.

In any case, that companies record location data on customers isn't new. Cell phone companies, for example, generally know where users are every time they make a call.

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